

AGEING CHAMPAGNE: Early versus Late Disgorgement

I would like to thank Moët & Chandon for their hospitality and generosity. We had a wonderful time visiting their vineyards and cellars and enjoyed some memorable champagnes and meals. A highlight of the trip was a comparative tasting of Dom Pérignon versus Dom Pérignon Oenothèque at the Abbey of Hautvillers, which inspired this essay on the ageing of champagne.

Introduction

The ageing of champagne is a unique process which sees the wine go through a transformation. This process is arguably more complex than for any still wine style. Champagnes spend a long time on its lees contributing to the subtle and complex flavours of the wine. Although the *Appellation Contrôlée* regulations only require 15 months on lees for a non-vintage and three years for vintage champagnes, prestige cuvées age their wines significantly longer. This capacity for ageing contributes in no small measure to the wonders of champagne.

Many champagne brands now offer bottles that have been disgorged later than their regular champagnes. Late-disgorged wines age differently from the initial release of the same vintage. They will also be at their peak at different times. The time of disgorgement determines, almost regardless of age, if the champagne will come across as fresh, youthful and still fairly acidic or mellow, with a golden colour and honeyed nose.

Theory and Process

Quality champagne is the outcome of many production decisions, all of which interact with each other to create the aromas and flavour of the final wine. The soil, climate, grape variety, rootstock, choice of yeast and several other factors will also affect its quality and ageing potential.

After the second fermentation in bottle (the so-called '*prise de mousse*' for which sugar, yeast and yeast nutrients have been added to the base wine), dead yeast cells or lees remain in the bottle. They contribute to the wine's depth and complexity through a process of self-destruction (*autolysis*)¹. The wine in a way 'digests' the yeasts as many compounds like proteins, polysaccharides and esters contained in yeasts are transferred very slowly and are changed or combined. The release of enzymes helps prevent oxidation and the increase of amino-acids imparts yeasty and toasty aromas and flavours to the champagne. In addition to enriching the flavours, this natural process also improves structure of the wine, longevity and ensures fine bubbles. It should be noted that the ageing of the base wine also influences the complex changes in aroma and flavours².

As long as the wine stays in contact with the lees, the ageing will be very slow. The carbon dioxide from the second fermentation acts as a conserving agent and very little oxygen will reach the wine. At some stage, the sediment of the lees must be removed through the process of disgorgement. The timing of this activity and the resulting ingress of oxygen is a determining factor in the taste of champagne.

¹ JACKSON, Ronald S. *Wine Science*, Academic Press, 2008, p.544

² HALLIDAY, James and JOHNSON, Hugh. *The Art and Science of Wine*, Firefly Books, 2007, p.119

The removal of the sediment was traditionally prepared by riddling the bottles (which are given quarter rotations on a daily basis while stacked in a wooden contraption, called *pupitre*, until the lees sediment is collected in the neck of the bottles). This process is still applied for prestige cuvées but has generally been replaced by a mechanised process (with robotic arms slowly rotating large cages of bottles). Normally, the bottle necks are then frozen in a brine solution so that the icy plug of sediment becomes semi-solid and, once the crown cap (or cork) is released, shoots out – or is disgorged (*dégorgement à la glace*). Any wine lost in the process is normally replaced with the ‘*vin de liqueur*’, a small amount of (old) wine usually mixed with a sugar solution (*dosage*). The level of sweetness will depend on the dosage as the integrated sugar causes the mellow and caramel-like character during ageing. Late-disgorged wines, on the other hand, require little dosage, if any. As the wine is already more mature and balanced, it requires less sweetness in terms of taste. The bottle is then quickly recorked and sealed. Although the process is done by machine for many types of champagne, prestige cuvées such as Dom Pérignon and Moët & Chandon Grand Vintage are entirely disgorged by hand and in some cases even without freezing the bottles (*dégorgement à la volée*).

Disgorgement is a shock for a wine as it is exposed to a large amount of oxygen, which may accelerate the oxidation process. Not surprisingly, this process is called “*l’opération*” (the surgery) by French cellar workers³.

The older the wine at disgorgement, the faster the oxidation process as the wine is more fragile and the shock greater. Richard Juhlin⁴ therefore believes that the optimal time for consumption of a champagne depends on the age of the wine when disgorged (-as an example, a wine that is aged 10-15 years when disgorged would be best consumed within 1-5 years and one disgorged after 15-20 years within 6 months to two years). The sweet spot of disgorgement, where champagne will benefit most from further keeping (with a window for consumption of 3-30 years) is, in his opinion, between five and eight years. This view on the decline of champagne after disgorgement is not shared by other experts (including Dom Pérignon’s chef de caves Richard Geoffroy) who believe that older late-disgorged wines will also keep developing gracefully for many more years.

Different disgorgements are often based upon slightly different blends. Many houses adjust the dosage, with later disgorgements typically receiving less sugar⁵. Some producers will encourage their champagne to be consumed a long time after disgorgement because the enhanced effect of oxidation will suit their rich and full-bodied style. A longer ageing will allow the liqueur de dosage to better integrate, thus creating more balance. On the other hand, other champagnes are more suited to consumption closer to their disgorgement date in order to capture their more youthful freshness.

There is no regulation that governs how long a champagne producer is required to hold back their product after disgorgement. Champagne maker Bruno Paillard, co-chair of the quality commission, which forms part of the Champagne region’s Project 2030, pleads for a rest of at least three months after disgorgement and increased disclosure about the disgorgement date. Prestige cuvées often apply six months to two years (or even longer) between disgorgement and release. Moët & Chandon Grand Vintage will be aged for a minimum of seven years and will have at least one year rest

³ SAVAGE, Gabriel. *Paillard pushes for new disgorgement rule*, The Drinks Business, 4 October 2013

⁴ JUHLIN, Richard. *Knowing When: Early versus Late-Disgorged Champagne*, The World of Fine Wine, Issue 6, 2005, p.71

⁵ STEVENSON, Tom. *Champagne*, Sotheby’s Publications, 1988, p.143

(compared with six months for the vintage champagne). Dom Pérignon's late-disgorged champagne often has two years of resting post-disgorgement in the cellar.

History

Following a successful experiment conducted for the US market in 1963 selling a limited amount of the late-disgorged 1947 vintage, Madame Lily Bollinger released in 1967 the late-disgorged 1952 vintage champagne in the British market. The choice of an older vintage that was recently disgorged and with a low dosage was considered a daring move at that time when aged champagne were not in fashion. Bollinger's iconic *Récemment Dégorgé* (RD) was born and it registered RD as a trademark.

Several other producers followed suit, including Jacquesson DT (Dégorgement Tardif), Veuve Cliquot Cave Privée, Krug Collection and Moët & Chandon Grand Vintage Collection. A relative late-comer among late-disgorged champagnes is Dom Pérignon Oenothèque (named after the French word for 'wine library') introduced back in 2000. In 2014, Dom Pérignon decided to rebrand Oenothèque to Dom Pérignon Plénitudes. Richard Geoffroy believes that champagne does not evolve in a linear fashion but ages in a series of stages which produce ideal drinking phases or "Plénitudes" (ages of fullness or peaks). At those times the champagne can be disgorged and released to bring consumers a different expression of the same vintage.

The first release of a Dom Pérignon coincides with the first Plénitude (P1), normally some five to eight years after the vintage, which shows 'harmony'. The second release or Plénitude (P2), evoking the active maturation of the yeasts, is at 12 to 20 years and expresses 'energy and intensity'. The final release (P3) is at 35 to 40 years and is about 'calm and complexity'. The associated aromas and flavours develop from those of brioche, fruit and flower (in P1), through nuts, dried fruit and honey (P2) to sandalwood, mushroom, musk and truffle (P3). The first release of Dom Pérignon Plénitude 2 took place in Spring 2014 from the 1998 vintage and was followed by the release of the 1971 Dom Pérignon Plénitude 3.

Taste

Late-disgorged champagnes are generally preferred by those who like the freshness and concentration of a youthful wine together with the complexity, finesse and subtlety that comes with age. Moët & Chandon's chief winemaker Benoit Gouez states that extended lees contact brings "an extra layer of reductive aromas (...) which I often describe as brown flavours such as toast, coffee and grilled nuts. On the palate it tends to extend the wine, give it more weight, and the longer on the yeast, the finer the bead."⁶

Sampled shortly after disgorgement, late-disgorged champagne will taste fresh, with less toasty and honey development, more pronounced fruit and often more reductive characteristics like flint and burnt matches. As time passes after disgorgement, one moves from notes of citrus fruit to floral notes (such as rose petals, white flowers), spice and nuts and then toast and candied fruit will emerge. In the words of Serena Sutcliffe⁷: "With age, Dom Pérignon takes on a totally seductive fresh-toast-and-coffee bouquet, one of the most intriguing scents in Champagne."

⁶ SCHMITT, Patrick. *A Question of Time in a Bottle*, The Drinks Business, 6 June 2014

⁷ SUTCLIFFE, Serena. *A Celebration of Champagne*, Mitchell Beazley, 1988

Champagnes with six to fifteen years of ageing before disgorgement will tend to get aromas of toast and biscuit mixed with concentrated fruit and cream⁸. On the other hand, champagnes with twenty or more years of ageing before disgorgement will show a bouquet of vanilla, coffee, toffee and nuts combined with still young acidity. It is therefore a very personal preference as neither type is necessarily better, but rather different.

Marketing

Champagne houses are able to promote pricier expressions of the same product based on the complex concept of extended ageing on lees. Late-disgorged champagne typically sells at a considerable premium, usually at least double the price of the first release and sometimes even more. This is due to the increased storage expense and the demand for its limited quantities but it also provides a rare opportunity to experience mature champagne aged in perfect conditions with impeccable provenance.

Consumer knowledge of champagne ageing and disgorgement is still limited (even among connoisseurs). All non-vintage and vintage champagnes undergo several disgorgements during their life-cycle, sometimes as many as five disgorgements during their 2-3 years of commercialisation (for a non-vintage champagne). A number of producers such as Bruno Paillard, Dom Pérignon, Jacquesson, Jacques Selosse and Krug have started to show the disgorgement date on their (back) labels. As Tom Stevenson states: “A disgorgement date helps knowledgeable consumers make an informed choice.”⁹ Wine critic Antonio Galloni announced in 2011 that he would only review non-vintage champagnes with the disgorgement date included¹⁰. The disgorgement date information indeed allows a consumer to appreciate two factors that influence the quality of champagne, the length of ageing on the lees (until disgorgement) and the period of rest after disgorgement when the champagne overcomes the oxidative shock. It can also keep retailers accountable to move stock in a timely fashion. To be most useful though the disgorgement date should be accompanied with further disclosure on the base vintage, blend, dosage and release date, possibly through a bottle code (as done by Krug) which permits the user to unlock this information through the Champagne house’s website.

Conclusion

Time is everything in the development of champagne. Champagne is a wine of celebration but also a wonderfully complex drink where ageing and time of disgorgement add another dimension to its appeal. Great champagne can age very gracefully, whether early or late disgorged. Choosing the ideal time to consume the wine is a matter of personal preference, but champagne lovers now have a great choice to drink their favourite beverage with different disgorgement dates benefiting from more or less extended lees ageing to suit their taste and preferences. To conclude, “Champagne is a special case. It is good when it is young, it is good when it is old.”¹¹

⁸ BAKER, Brad. <http://www.champagnewarrior.com> (Retrieved 4 July 2014)

⁹ FURER, David. *Lanson to add disgorgement dates to labels*, www.decanter.com, 26 March 2010

¹⁰ BONNE, Jean. *Just say Yes to disgorgement dates*, Inside Scoop SF, 12 August 2011

¹¹ PRIAL, Frank. *Old Champagne Needs a Loving Home*, The New York Times, 12 April 2000

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